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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/016,429  | 11/01/2001  | Wu-Hsiung Ernest Hsu | 5707-136            | 6707             |
| 20575   | 7590        | 11/21/2003           | EXAMINER            |                  |
| MARGER JOHNSON & MCCOLLOM PC<br>1030 SW MORRISON STREET<br>PORTLAND, OR 97205 |             |                      | YAO, SAMCHUAN CUA   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |

1733

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                  |              |  |
|------------------------------|------------------|--------------|--|
| <b>Office Action Summary</b> | Application No.  | Applicant(s) |  |
|                              | 10/016,429       | HSU ET AL.   |  |
|                              | Examiner         | Art Unit     |  |
|                              | Sam Chuan C. Yao | 1733         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 9-23, 25-27, 29-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/25999 in view of Bonomo et al (US 5,980,798) for reasons of record set forth 09-09-03 numbered paragraph 9.

3. Claims 1-3, 5-7, 9-10, 21-23, 25-27, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomo et al (US 5,980,798) in view of WO 0/25999 for reasons of record set forth 09-09-03 numbered paragraph 10.

4. Claims 1-7, 9-10, 21-27, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breiter et al (US 4,854,994) in view of WO 0/25999 for reasons of record set forth 09-09-03 numbered paragraph 11.

5. Claims 4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered paragraph 9 or 10 as applied to claim 1 or 21 above, and further in view of Tisch (US 5,433,905) and Camp, III (US 3,992,135) for reasons of record set forth 09-09-03 numbered paragraph 12.

### ***Response to Arguments***

6. Applicant's arguments filed on 11-05-03 have been fully considered but they are not persuasive.

Counsel argues that on pages 8-9 that, claim 1 requires *"at least about 50% of the VOC and HAP emissions produced are withdrawn during the formation of the lignocellulosic product"*, while WO '999 is conducted in the presence of high pressure injected steam in a formation area. Accordingly, more VOC and HAP are produced and *"are not withdrawn during high pressure method"* of WO '999. Examiner strongly disagrees with Counsel's characterization of the WO '999 patent. While WO '999 may not explicitly disclose withdrawing *"at least about 50% of the VOC and HAP emissions produced"*, such is implicitly understood to be taking place in the teachings of WO '999. As noted in the prior office action, WO '999 teaches continuously capturing steam and gaseous material emitted (i.e. taken to include VOC and HAP) in the heat-pressing operation by application of suction pressure so that the lignocellulosic board is produced *"without VOC-emissions or formaldehyde-emissions to the workshop areas and to the ambient environment"* (page 2 full paragraph 1; emphasis added). On page 3 full paragraph 1, WO '999 further teaches *"[s]team and other emissions are captured before being able to escape into the workshop area or to ambient atmosphere, by a suction unit 8 provided to this end inside the press."* (letter replaced; emphasis added). These passages clearly would have suggested to one in the art that, *at least about 50% of the VOC and HAP emissions produced* are captured by a suction/vacuum unit. Equally important, even for the sake of argument that, there is VOC and HAP withdrawal problem in the process taught by WO '999, most, if not all, of the VOC and HAP generated in a process of WO '999 modified by the teachings of Bonomo must be captured by a suction/vacuum unit because, a modified press is substantially closed/sealed. As for

Counsel's argument regarding claims 2-3, 5 and 7, Counsel's attention is directed to figure 1, page 3 full paragraph 1 and claims 1 and 5, particularly **suction (i.e. vacuum) unit 8** of the WO '999 patent. Figure 1 appears to show four suction devices in the belt press taught by WO '999. For this reason, no significant increase in pressure should/would be expected.

Counsel argues on page 9 full paragraph 1 that, Bonomo et al employs a sealed system, while Applicant provide a closed system which is not under high pressure. It is respectfully submitted that, a closed system reads on a sealed system, because according to a dictionary definition (i.e. Merriam-Webster's Collegiate Dictionary 10<sup>th</sup> Edition), the term "*closed*" is defined as not open or enclosed. Equally important, Counsel's argument is not commensurate with the scope of the recited independent claims. None of the independent claims preclude operating in a high pressure system. As for the recovery of VOC and HAP emissions, as noted above, WO '999 clearly teaches applying suction (i.e. vacuum) pressure to prevent any VOC material from escaping. The continuous application of a suction pressure during a pressing operation should prevent the pressure in the modified press of Bonomo et al from significantly increasing. As for Counsel's argument on page 9 last three lines to page 10, Examiner strongly disagrees with Counsel's assertion that there is no motivation to combine. Counsel's attention is directed to page 4 numbered paragraph 9. As noted in the prior office action, the motivation is to prevent loss of valuable steam to surrounding environment. Moreover, this further ensures that no VOC and HAP generated in a pressing operation escape to the surrounding environment. As for Counsel's argument

on page 10 last paragraph to page 11 line 6, once again, Counsel is making a distinction without a distinction. A closed system reads on a sealed system. In other words, the presently claimed subject matter does not preclude a sealed system. As for Counsel's arguments on last paragraph on page 11 to page 12, claims 4 or claim 24 does not preclude the use of high pressure gas or heated high pressure air for curing a lignocellulose mat in a press.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff H Aftergut can be reached on (703) 308-2069. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2058.



Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
11-18-03